

ABSTRACT

The present invention is directed to systems and methods for hosting the CLR in a DBMS in order to achieve reliability, scalability, security, and robustness for enabled DBMS programming features. Integrating the CLR with a DBMS enables programming features in the database such as stored procedures, functions, triggers, types, and aggregates to be written in any of the programming languages that are compiled into IL code supported by the CLR. For the various embodiments of the present invention, the CLR is hosted inside the DBMS and, instead of making requests directly to the server operating system, the CLR instead interfaces with the DBMS via DBMS APIs for such requests, and only the DBMS directly interfaces with the server operating system to access the server.